Isiah Leggett, Montgomery County Executive

# DESIGN NEWSLETTER

Arthur Holmes, Jr., Director, Department of Transportation

JANUARY 2009

## Rehabilitation of Cedar Lane Bridge No. M-0074 over Rock Creek Design Update Number 1

Department of Transportation
Division of
Transportation Engineering

101 Monroe Street, 9th Floor Rockville, MD 20850 Phone: 240-777-7223 Fax: 240-777-7277

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For alternative formats of this newsletter, please contact the Division of Transportation Engineering at 240-777-7223. This information is available in alternative formats by calling 240-777-7220 (voice), TTY users call Maryland Relay.

Design Newsletter is a project newsletter published by the Department of Transportation (DOT).

#### **PURPOSE**

To inform and receive input from you regarding the pending bridge rehabilitation currently under design for the Cedar Lane bridge over Rock Creek located between the intersection with Beach Drive and the I-495 Capital Beltway bridge crossing over Cedar Lane. Furthermore, to inform the public of proposed construction schedules and the potential impact of the construction activities on vehicular



and pedestrian traffic. A location map of the project site is attached hereto.

#### INTRODUCTION AND DESCRIPTION

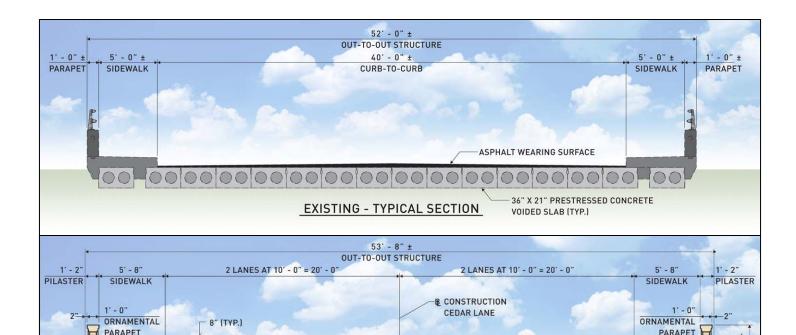
This project provides for the rehabilitation of the deteriorating Cedar Lane bridge No. M-0074 over Rock Creek. The existing Cedar Lane bridge is a four (4) span adjacent pre-stressed concrete voided slab beam structure. This structure carries a 40'-0" clear roadway (4 lanes) with 5'-0" wide sidewalks and

one foot parapets on each side, for a total width of 52'-0" (see page 2). The existing bridge was built in 1959. In 1996, the bridge was resurfaced with asphalt and new concrete sidewalks and parapets were constructed.

This project provides for the in-kind replacement of the four (4) superstructure spans and the rehabilitation of the existing concrete piers and abutments. Recent inspections revealed deterioration of the structure including numerous longitudinal cracks up to 1/8" wide, some with water leakage and efflorescence, in the underside of the pre-stressed concrete beams. There are random concrete spalls in the pre-stressed concrete beams which exhibit exposed and corroded reinforcing steel. Severe cracks and spalling



with exposed and corroded reinforcing are also evident in the bridge abutments and piers.



PROPOSED - PRESTRESSED CONCRETE ADJACENT SOLID SLAB BEAM BRIDGE TYPICAL SECTION

The proposed rehabilitation work is necessary to provide a safe roadway condition for the traveling public and prolong the service life of the structure.

MODIFIED CONCRETE OVERLAY

1%

The county is currently studying two (2) construction alternatives which are (1) Phased Construction and (2) Roadway Closure, for the rehabilitation of the Cedar Lane bridge. As part of this, we are performing a traffic study to determine the impact on the detour route if the road is closed during construction. In *Phased* Construction Alternative, the construction will be done in phases and vehicle and pedestrian traffic will be maintained on the structure during construction. The Roadway Closure Alternative. would result in a vehicle detour route and the construction of a pedestrian bridge spanning over Rock Creek. The current estimate for construction and associated costs is approximately \$2.1 million for the Road Closure Alternative and \$2.7 million for the Phased Construction Alternative.

#### **DESIGN AND CONSTRUCTION SCHEDULE**

1%

48" X 21" PRESTRESSED CONCRETE SOLID SLAB (TYP.)

This project is currently at the preliminary design stage (15% complete). The design is scheduled to be finished in the Spring of 2010. The construction is planned to begin either in the Fall of 2010 or in the Summer of 2011, depending on which construction alternative is chosen. For the Road Closure Alternative the construction duration is estimated at three (3) months and in the Phased Construction Alternative the duration is estimated at twelve (12) months.

3

2%

#### IMPACT TO YOU AND THE COUNTY SERVICES

A traffic study is being conducted to determine the impact a Roadway Closure will have on detour routes and essential public services during construction. For Phased Construction Alternatives, traffic control plans will be developed to permit safe passage for vehicular and pedestrian traffic during construction activities. Construction activities associated with this project will not impact the delivery of existing County Services nor mail deliveries.

#### WHO IS RECIVING THIS NEWSLETTER?

This newsletter is being sent to all residents who are on the project's mailing list and to the owners of businesses located in the immediate vicinity. Please share this information with your neighbors. If they want to receive future newsletters, please have them contact the Montgomery County Division of Transportation Engineering, at 240-777-7210, to have their names added to the mailing list. This information is available in alternate formats by calling 240-777-7220 (voice), TTY users call Maryland Relay

#### COMMUNITY FEEDBACK IS IMPORTANT

We hope that you take the time to read this newsletter and carefully review the presentation located on the county website at: http//www. Montgomerycountymd.gov/content/dot/dcd/index.asp. Should you have any questions and/or concerns, please do not hesitate to contact the project manger, Mr. Brian Copley at 240-777-7227 or via e-mail at:

brian.copley@montgonmerycountymd.gov.

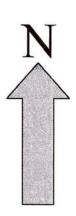
Your feedback is essential to us in implementing the best construction alternative that minimizes community disruption.

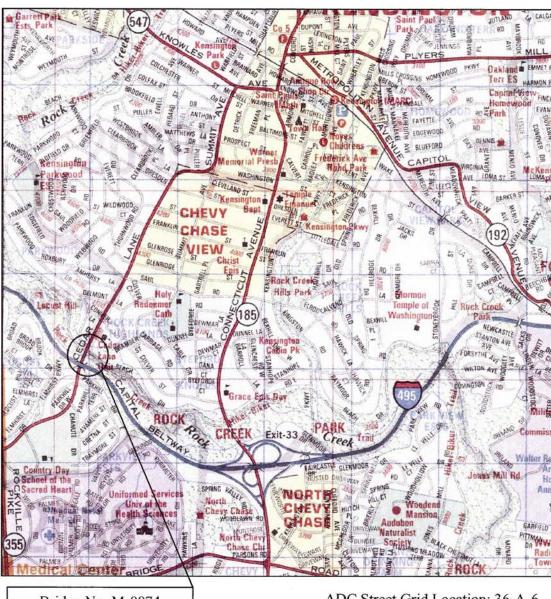
#### **PUBLIC COMMENTS FORM**

For the general public to provide comments and/ or concerns, a pre-paid postage "Public Comments Form" is provided with this newsletter. <u>Please return the completed form</u> by February 20, 2009.

#### **FUTURE STEPS IN THE PROCESS**

Upon receiving the Public Comments Form, Montgomery County Department of Transportation (MCDOT) will review and assess the comments. The traffic study is expected to be completed by February 2009 and the results of the study and the public comments will be published in a future newsletter.





Bridge No. M-0074 Cedar Lane over Rock Creek ADC Street Grid Location:  $\underline{36\text{-}A\text{-}6}$   $33^{\text{rd}}$  Edition

## **LOCATION MAP**

**SCALE: 1" = 2,000'** 



Division of Transportation Engineering Transportation Planning and Design Section 101 Monroe Street, 9th Floor Rockville, Maryland 20850-2540

Phone: 240-777-7223 Fax: 240-777-7277

## DIVISION OF TRANSPORTATION ENGINEERING

The Division of Transportation Engineering (DTE) is responsible for planning, engineering, and constructing Montgomery County's infrastructure to the highest safety and performance standards possible while paying close attention to citizen's input, environmental and economic concerns. Today, DTE is responsible for more than 2,000 miles of primary and secondary roads and more than 253 bridges. DTE has three main sections: Planning, Design and Construction.

We plan to provide you with periodic updates on this project.

Questions AboutContactPhone NumberProject DesignBrian Copley240-777-7227Mailing ListJackie Earp240-777-7210

#### Website Information

For information on this, and other transportation projects in the County, please visit our website at: http://www.montgomerycountymd.gov/content/dot/dcd/index.asp



## **Public Comments Form**

Public input is the key to an effective planning process as it allows MCDOT to understand the needs and concerns of your community. We encourage you to complete this form. Your comments will become a part of public files.

County Executive Isiah Leggett

Arthur Holmes, Jr. Director Montgomery County Department of Transportation



Rehabilitation of Cedar Lane Bridge No. M-0074 over Rock Creek

Please return
Public Comments Form by:

Friday, February 20, 2009

Division of Transportation Engineering 101 Monroe Street, 9th FI Rockville, MD 20850

Project Manager:
BRIAN COPLEY
P: 240-777-7227
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E-Mail:
Brian.Copley@
montgomerycountymd.gov



Name:	
Address:	
Phone:	
E-mail Address:	

### **Comments**



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The Montgomery County Department of Transportation (MCDOT) always welcomes your feedback. This form is to provide an opportunity for you to comment on the proposed:

**FOLD AND TAPE** 

Rehabilitation of Cedar Lane Bridge

POSTAGE PAID BY THE MONTGOMERY COUNTY DEPARTMENT OF TRANSPORTATION

ATTN: PROJECT MANAGER, BRIAN COPLEY